											DQA:	Date:		
NCR:	Yes	/ No				WORK ORDER NON-	COI	VFORM	MANCE / UPD	DATE	0.4.611-			
										QA Closed:	Date:			
Work Ord	er.					DISPOSITION	AGAINST DEPARTMENT/PROCESS							
Work Ord	٠٠٠ -	•			· · ·	Rework	:	Skid-tube	Crosstube]	Water Jet	Engineering		
Part I	No.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality	
	-					Use-as-is		Therm	noforming	Finishing	Rec/Sto	re/Packaging	Other	
NCR I	No.					Work Order Update			Large Fab Composite			Supplier		
Root					Descri	Iption of work order update		Initial	itial Action		Sign &			
Cause	İ	Date	Step	Qty	C	or Non-conformance	Ch	nief Eng	Descr	iption	Date	Verification	QC Inspector	
Doc/Data														
Equip/Tooling														
Operator	Ш													
Material	Ш													
Setup	Ш													
Other														
Process	Ш			.		, was								
Supplier						* *								
Training	Ш													
Unapproved														
							AUI	LT CATE	GORY					
Landi					_	General		1			7		7	
Bending						Bend		Grain			Ovalized	<u> </u>	Pressure/Forced	
Centre Not Concentric to O/S			BOM/Route	L	Hardwa			Over/Under	<u> </u>	Temperature/Cure				
ļ ·	Cracks			<u></u>	Broken/Damaged	\perp	-i '	on Incomplete		Part Incorre	_	Weld		
	Crushed/Crimped.				Burrs		┪	ions Incomplete/U	Jnclear	Part Lost/M		Wrong Stock Pulled		
	Cuffs					Contamination		Mainte		<u> </u>	Part Moved			
	\vdash	Heat Trea			<u></u>	Countersink	\perp	Mislabe			Positioned	· · · · · ·	-	
	Ш	Inspectio	n Strip in	Tube		Cut Too Short		Misread	t		Power Loss,	/Surge	Other	
Ripples in Bend				Drill Holes		Offset								

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde September-14-12				*902	77*							Page
Item ID: Revision ID: Item Name:	D3478-3 Tube			Accept	*N900	040	100)*	Setup	Start Stop	IV.	S1* S2*
Start Date: Required Date: Reference:	9/14/12 10/19/12	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*		Cust Item l Customer:	ID:					, a	
Approvals:	Process P	lan:	Date:	Tooling:	D	ate:	_	· -	Run	Start	"[7]	R1*
	QC:		Date:	SPC (Y/N):	D	ate:				Stop	*N	R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
130		Identify as per dwg & Sto	ck Location:	0.00								
130 Packaging Packaging		Мето		0.00								

0.00

0.00

QC21- Final Inspection - Work Order Release

Memo

140

*14**0***

Quality Control

CL 1401.23

NCR: Y	es / No				WORK ORDER NON-	CON	IFORM	MANCE / UF	PDATE				
			`							QA Closed:	Date	:	
Work Orde	er:				DISPOSITION		AGAINST DEPARTMENT/PROCESS						
Part No.					Rework Scrap Use-as-is		Skid-tube Crosstube Machining Small Fab Thermoforming Finishing			Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other		
NCR No.					Work Order Update	╛╽		Large Fab	Composite		Supplier		
Root				Descri	ption of work order update	1	nitial	A	ction	Sign &			
Cause	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Des	cription	Date	Verification	QC Inspector	
Doc/Data													
Equip/Tooling													
Operator													
Material	Material												
Setup													
Other													
Process			1										
Supplier								[
Training						1							
Unapproved													
						FAUL	T CATE	GORY					
Landi	ng Gear				General					_	-	_	
	Bending				Bend		Grain			Ovalized	Ĺ	Pressure/Forced	
	Centre Not Concentric to O/S		BOM/Route		Hardwa	ire		Over/Under	tolerance	Temperature/Cure			
	Cracks		Broken/Damaged		Inspect	ion Incomplete		Part Incorre	ct _	Weld			
	Crushed/Crimped.		Burrs		Instruct	ions Incomplete	/Unclear	Part Lost/M	issing	Wrong Stock Pulled			
	Cuffs				Contamination		Mainte	enance		Part Moved	_		
	Heat Tre	at			Countersink		Mislabe	eled		Positioned \	Vrong _		
	Inspection	n Strip in	Tube		Cut Too Short		Misread	d		Power Loss/	Surge	Other	
	Ripples ii	n Bend			Drill Holes		Offset			= 			
	Torque V	Vaves in E	Extrusion	, [Drawing		Out of	Calibration			<u> </u>		

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

September-14-12 9:54:24 AM

Work Order ID:

90227

Parent Item:

D3478-3

Parent Item Name:

Tube

Start Date: 9/14/12

Required Date: 10/19/12

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP Rev:A New Issue 06-02-03 JLM

IPP Rev:B As per Rev B 06-05-24 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S26GA		Purchased	No			100	sf	230.4000	0.15	0.3	-		-
304/316 0.018 SHEET									2				JM V2-10
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT020		230.4							

230.4 117798 38.4 122753 192

122753

											DQA:	Date	2:		
NCR:	Yes ,	/ No				WORK ORDER NON-C	100	NFORM	MANCE / UPDAT		04.61	Date			
											QA Closed:	Date	2:		
Work Ord	or:					DISPOSITION		AGAINST DEPARTMENT/PROCESS							
WORK Ord	ei. <u> </u>					Rework			Skid-tube C	rosstube		Water Jet	Engineering		
Part No.						Scrap	1 1		 	Small Fab	Proc	d. Eng. Coor.	Quality		
1 4111						Use-as-is Thermoforming Finishing			e/Packaging	Other					
NCR No.						Work Order Update			~	omposite	•	Supplier			
L	_														
Root					Descri	ption of work order update	1	nitial	Action		Sign &				
Cause		Date	Step	Qty	,	or Non-conformance	Ch	ief Eng	Description	on	Date	Verification	QC Inspector		
Doc/Data	Ш	:													
Equip/Tooling	Ш														
Operator	Ш														
Material	Ш											l			
Setup	Н														
Other	Ш														
Process	Н	!													
Supplier	H						l								
Training	Н						ł								
Unapproved				<u> </u>			A ! ! !	T CATE	CORV						
Landi	na Ga					General	AUI	LICATE	GURT						
Lanui		Bending				Bend		Grain			Ovalized	Г	Pressure/Forced		
Centre Not Concentric to O/S			BOM/Route	\vdash	Hardwa	ro	—	Ovanzeu Over/Under	tolerance	Temperature/Cure					
Cracks			Broken/Damaged	-	1	on Incomplete	<u> </u>	Part Incorre	⊢	Weld					
Cracks Crushed/Crimped.			Burrs	\vdash	4	ions Incomplete/Uncle		Part Lost/Mi	- t-	Wrong Stock Pulled					
	$\boldsymbol{\vdash}$		umpeu.		-	-1		1		ļ	Part Moved	331116	VVIOIIS SLOCK I' diled		
Cuffs Heat Treat			Countersink	 	Contamination Maintenance Countersink Mislabeled			Positioned V	Vrong						

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

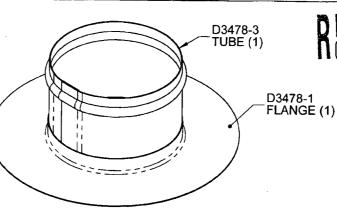
Folio

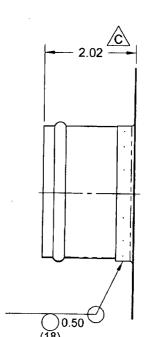
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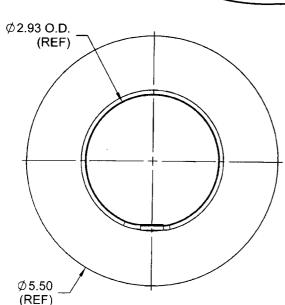


		1							
	DESIG	h	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA					
	DATE 08.12.19		APPROVED	DRAWING NO. D3478	REV. C SHEET 1 OF 7				
			2.19	AIR INLET ADAPTER	SCALE 1:2				
	Α	0:	5.12.08	NEW ISSUE					
	В	0	6.05.16	REDESIGN D3478-5, ADD D3478-	7, D3478-9S/-9				
	С	0	8.12.19	2.02 WAS 2.018 (SHT 1); ADD TO MFG NOTE (SHT 3); MATL SPEC MIL-S-5059	L (SHT 3); ADD WAS				

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WORK ORIDER
NO. 910.22.7. MLT ENGINEERING RETURN TO







D3478-041 AIR INLET ADAPTER

NOTES:

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) IDENTIFY WITH DART P/N D3478-041 USING FINE POINT PERMANENT INK MARKER
 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
Х	D3478-041	AIR INLET ADAPTER
1	D3478-1	FLANGE
1	D3478-3	TUBE

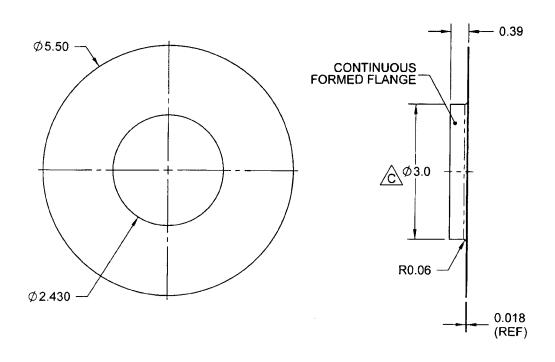
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DESIGN	DRAW BY	DART AEROSPAC HAWKESBURY, ONTARIO, O	
CHECKED	APPROVED	DRAWING NO.	REV. C
RH	971	D3478	SHEET 2 OF 7
DATE		TITLE	SCALE
08	.12.19	AIR INLET ADAPTER	1:2

RELEASED



D3478-1F FLANGE FLAT PATTERN

D3478-1 FLANGE

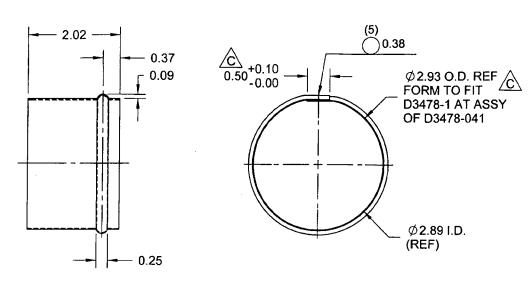
NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5059 (ANNEALED) 2B FINISHOR AMS 5513/5524, 26 GAUGE SS (0.018 THICK)
 (REF. DART SPEC. M304S26GA)
 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 3) ALL DIMENSIONS ARE IN INCHES
 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

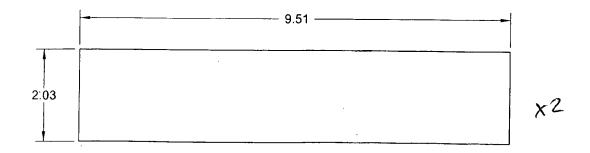


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DESIGN	DRAWNEY	DART AEROSPAC HAWKESBURY, ONTARIO, O	
CHECKED	APPROVED	DRAWING NO.	REV. C
RH	##	D3478	SHEET 3 OF 7
DATE		TITLE	SCALE
30	3.12.19	AIR INLET ADAPTER	1:2





D3478-3 TUBE



D3478-3F TUBE FLAT PATTERN

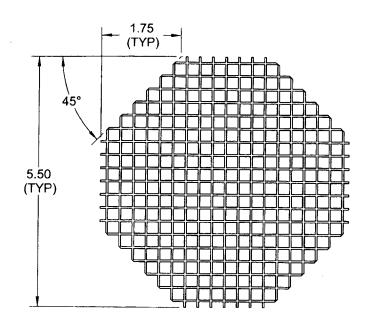
NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524, 26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
 2) SPOT WELD PER DART QSI 018
 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED 4) ALL DIMENSIONS ARE IN INCHES 5) BREAK ALL SHARP EDGES 0.005 TO 0.010



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DESIGN	DRAWN BY	DART AEROSPACE HAWKESBURY, ONTARIO, C	
CHECKED	APPROVED	DRAWING NO.	REV. C
PU	91	D3478	SHEET 4 OF 7
DATE		TITLE	SCALE
 08	12.19	AIR INLET ADAPTER	1:2

RELEASED MONISON

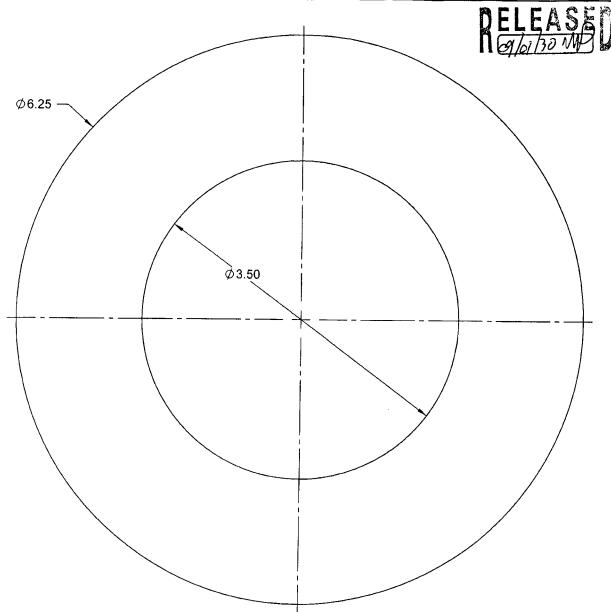


D3478-5 SCREEN

NOTES:

- 1) MATERIAL: #4 MESH SCREEN, 0.203" OPENING, Ø0.047" WIRE (REF. DART SPEC. M304MS4.203-.047)
 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED 3) ALL DIMENSIONS ARE IN INCHES
 4) BREAK ALL SHARP EDGES 0.005 TO 0.010





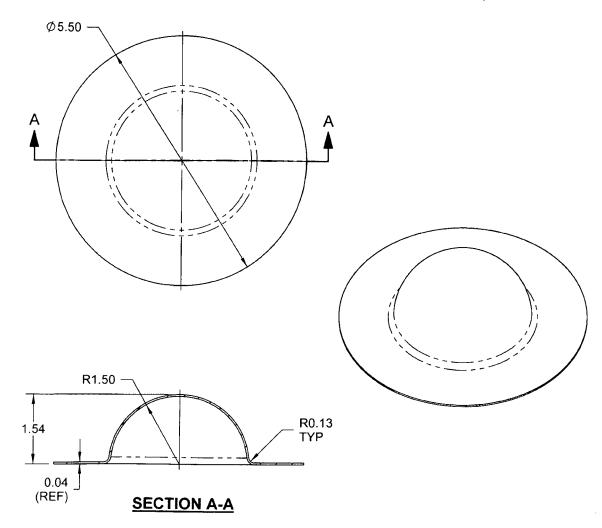
D3478-7 INLET GASKET

NOTES:

- 1) MATERIAL: RED (OR GRAY) 60 DUROMETER HI-TEMPERATURE SILICONE SHEET, 0.063 THICK (REF. DART SPEC. M-SIL60-S.063)
 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 3) ALL DIMENSIONS ARE IN INCHES
 4) BREAK ALL SHARP EDGES 0.005 TO 0.010



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PH.		D3478	SHEET 6 OF 7
DATE		TITLE	SCALE
08	.12.19	AIR INLET ADAPTER	1:2



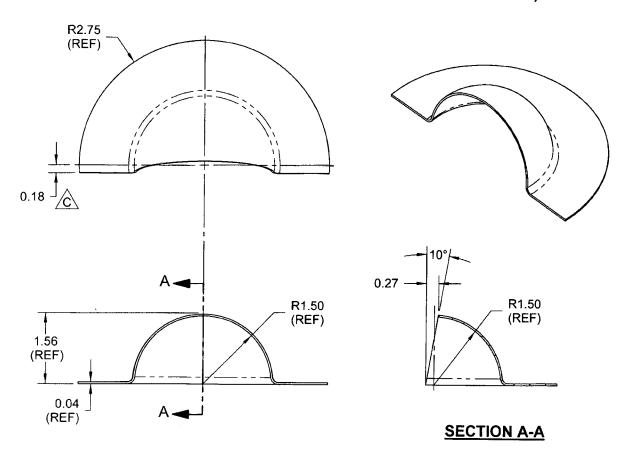
D3478-9S AIR INLET SCOOP, SPINNING DETAIL

NOTES:

- 1) MATERIAL: 2024-0 ALUMINUM SHEET, 0.040" THICK PER AMS-QQ-A-250/4 OR AMS 4037 (REF. DART SPEC. M2024T0S.040)
 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED 3) ALL DIMENSIONS ARE IN INCHES 4) BREAK ALL SHARP EDGES 0.005 TO 0.010



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	<u> </u>	HAWKESBURY, ONTARIO	, CANADA
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RY		D3478	SHEET 7 OF 7
DATE	·	TITLE	SCALE
08.	.12.19	AIR INLET ADAPTER	1:2



D3478-9 INLET SCOOP (MAKE FROM D3478-9S)

- 1) MATERIAL: MAKE FROM D3478-9S
 2) IDENTIFY WITH DART P/N D3478-9 USING FINE POINT PERMANENT INK MARKER
 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) ALL DIMENSIONS ARE IN INCHES
 5) BREAK ALL SHARP EDGES 0.005 TO 0.010